

K050980

MAY 26 2005

PARADIGM  
MEDICAL INDUSTRIES, INC.

510(k) Premarket Notification  
Model P60 UBM Ultrasonic Bio-Microscope

## 510(k) SUMMARY

### Submitter's Name, Address, Telephone Number, Contact Person and Date Prepared.

Paradigm Medical Industries, Inc.  
2355 South 1070 West  
Salt Lake City, Utah 84119  
Phone: (801) 977-8970  
Fax: (801) 977-8973

Contact Person: Edward A. Kroll  
Representative Consultant for  
Paradigm Medical Industries, Inc.  
5905 Fawn Lane  
Cleveland, Ohio 44141  
Phone: (440) 546-9810  
Fax: (440) 546-9124

Date Prepared April 15, 2005

### Name of Device

Model P60 Ultrasonic Bio-Microscope

### Common or Usual Name

Ultrasound System

### Classification Name

Ultrasonic Pulsed Echo Imaging System

### Predicate Devices

Paradigm Medical Model P45 Ultrasonic Bio-Microscope

### Intended Use

To acquire and display high resolution images of the anterior segment of the eye.

## **Device Description**

The Model P60 UBM is a PC-based digital instrument that utilizes ultrasonic energy to generate various images of the eye. The pulser circuitry is designed to accept information from the user via a graphical user interface provided by the software. The pulser generates signals specific to the probe installed. The signal acquired from the transducer is translated into an image that is displayed on an LCD monitor.

## **Performance Data**

The Model P60 UBM has been tested to and meets the applicable requirements of IEC60601-1.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Paradigm Medical Industries, Inc.  
c/o Mr. Edward A. Kroll  
President  
Spectre Solutions, Inc.  
5905 Fawn Lane  
CLEVELAND OH 44141

**MAY 26 2005**

Re: K050980

Trade Name: Paradigm Medical Model P60 Ultrasonic Bio-Microscope  
Regulation Number: 21 CFR §892.1560  
Regulation Name: Ultrasonic pulsed echo imaging system  
Product Code: IYO  
Regulation Number: 21 CFR §892.1570  
Regulation Name: Diagnostic ultrasonic transducer  
Product Code: ITX  
Regulatory Class: II  
Dated: April 15, 2005  
Received: April 21, 2005

Dear Mr. Kroll:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the Paradigm Medical Model P60 Ultrasonic Bio-Microscope as described in your premarket notification:

Transducer Model Numbers

B-Scan (10 MHz)	B-Scan (20 MHz)	35 MHz Water-Path	50 MHz Water-Path
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If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can

be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This determination of substantial equivalence is granted on the condition that prior to shipping the first device, you submit a postclearance special report. This report should contain complete information, including acoustic output measurements based on production line devices, requested in Appendix G, (enclosed) of the Center's September 30, 1997 "Information for Manufacturers Seeking Marketing Clearance of Diagnostic Ultrasound Systems and Transducers." If the special report is incomplete or contains unacceptable values (e.g., acoustic output greater than approved levels), then the 510(k) clearance may not apply to the production units which as a result may be considered adulterated or misbranded.

The special report should reference the manufacturer's 510(k) number. It should be clearly and prominently marked "ADD-TO-FILE" and should be submitted in duplicate to:

Food and Drug Administration  
Center for Devices and Radiological Health  
Document Mail Center (HFZ-401)  
9200 Corporate Boulevard  
Rockville, Maryland 20850

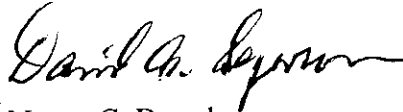
This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>

Page 3 – Mr. Edward Kroll

If you have any questions regarding the content of this letter, please contact Mr. Rodrigo C. Perez at (301) 594-1212.

Sincerely yours,

A handwritten signature in black ink, appearing to read "David A. Brogdon".

*for* Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal and Radiological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosures

# DIAGNOSTIC ULTRASOUND INDICATIONS FOR USE FORM

System: Model P60  
 Transducer: \_\_\_\_\_

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode Of Operation									
	A	B	M	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other* (Specify)
Ophthalmic		N								
Fetal										
Abdominal										
Intraoperative (Specify)										
Intraoperative Neurological										
Pediatric										
Small Organ (Specify)										
Neonatal Cephalic										
Adult Cephalic										
Cardiac										
Transesophageal										
Transrectal										
Transvaginal										
Transurethral										
Intravascular										
Peripheral Vascular										
Laparoscopic										
Musculo-skeletal Conventional										
Musculo-skeletal Superficial										
Other (Specify)										

N= new indication; P= previously cleared by FDA; E= added under Appendix E

Additional Comments: Sulcus-to-sulcus imaging  
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 \_\_\_\_\_  
 Concurrence of Center for Devices and Radiological Health, Office of Device Evaluation

Prescription Use (Per 21 CFR 801.109)

*David A. Lynn*  
 \_\_\_\_\_  
 (Division Sign-Off)  
 Division of Reproductive, Abdominal,  
 and Radiological Devices  
 510(k) Number K050980

# DIAGNOSTIC ULTRASOUND INDICATIONS FOR USE FORM

System: \_\_\_\_\_

Transducer: B-Scan (10 MHz)

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode Of Operation									
	A	B	M	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other* (Specify)
Ophthalmic		N								
Fetal										
Abdominal										
Intraoperative (Specify)										
Intraoperative Neurological										
Pediatric										
Small Organ (Specify)										
Neonatal Cephalic										
Adult Cephalic										
Cardiac										
Transesophageal										
Transrectal										
Transvaginal										
Transurethral										
Intravascular										
Peripheral Vascular										
Laparoscopic										
Musculo-skeletal Conventional										
Musculo-skeletal Superficial										
Other (Specify)										

N= new indication; P= previously cleared by FDA; E= added under Appendix E

Additional Comments: \_\_\_\_\_  
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Concurrence of Center for Devices and Radiological Health, Office of Device Evaluation

*David A. Lippman*

(Division Sign-Off)

Division of Reproductive, Abdominal,  
and Radiological Devices

510(k) Number

K050980

Prescription Use (Per 21 CFR 801.109)

# DIAGNOSTIC ULTRASOUND INDICATIONS FOR USE FORM

System: \_\_\_\_\_

Transducer: B-Scan (20 MHz)

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:


Clinical Application	Mode Of Operation									
	A	B	M	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other* (Specify)
Ophthalmic		N								
Fetal										
Abdominal										
Intraoperative (Specify)										
Intraoperative Neurological										
Pediatric										
Small Organ (Specify)										
Neonatal Cephalic										
Adult Cephalic										
Cardiac										
Transesophageal										
Transrectal										
Transvaginal										
Transurethral										
Intravascular										
Peripheral Vascular										
Laparoscopic										
Musculo-skeletal Conventional										
Musculo-skeletal Superficial										
Other (Specify)										

N= new indication; P= previously cleared by FDA; E= added under Appendix E

Additional Comments: \_\_\_\_\_  
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Concurrence of Center for Devices and Radiological Health, Office of Device Evaluation

  
 (Division Sign-Off)  
 Division of Reproductive, Abdominal,  
 and Radiological Devices  
 510(k) Number K050980

Prescription Use (Per 21 CFR 801.109)



# DIAGNOSTIC ULTRASOUND INDICATIONS FOR USE FORM

System: \_\_\_\_\_

Transducer: 35 MHz Water-Path

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode Of Operation									
	A	B	M	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other* (Specify)
Ophthalmic		N								
Fetal										
Abdominal										
Intraoperative (Specify)										
Intraoperative Neurological										
Pediatric										
Small Organ (Specify)										
Neonatal Cephalic										
Adult Cephalic										
Cardiac										
Transesophageal										
Transrectal										
Transvaginal										
Transurethral										
Intravascular										
Peripheral Vascular										
Laparoscopic										
Musculo-skeletal Conventional										
Musculo-skeletal Superficial										
Other (Specify)										

N= new indication; P= previously cleared by FDA; E= added under Appendix E

Additional Comments: \_\_\_\_\_  
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Concurrence of Center for Devices and Radiological Health, Office of Device Evaluation

*David A. Lippman*

(Division Sign-Off)  
 Division of Reproductive, Abdominal,  
 and Radiological Devices  
 510(k) Number

Prescription Use (Per 21 CFR 801.109)

K050980

# DIAGNOSTIC ULTRASOUND INDICATIONS FOR USE FORM

System: \_\_\_\_\_

Transducer: 50 MHz Water-Path

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode Of Operation									
	A	B	M	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other* (Specify)
Ophthalmic		N								
Fetal										
Abdominal										
Intraoperative (Specify)										
Intraoperative Neurological										
Pediatric										
Small Organ (Specify)										
Neonatal Cephalic										
Adult Cephalic										
Cardiac										
Transesophageal										
Transrectal										
Transvaginal										
Transurethral										
Intravascular										
Peripheral Vascular										
Laparoscopic										
Musculo-skeletal Conventional										
Musculo-skeletal Superficial										
Other (Specify)										

N= new indication; P= previously cleared by FDA; E= added under Appendix E

Additional Comments: \_\_\_\_\_  
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Concurrence of Center for Devices and Radiological Health, Office of Device Evaluation

*David R. Korman*

(Division Sign-Off)  
 Division of Reproductive, Abdominal,  
 and Radiological Devices  
 510(k) Number \_\_\_\_\_

Prescription Use (Per 21 CFR 801.109)

K050980